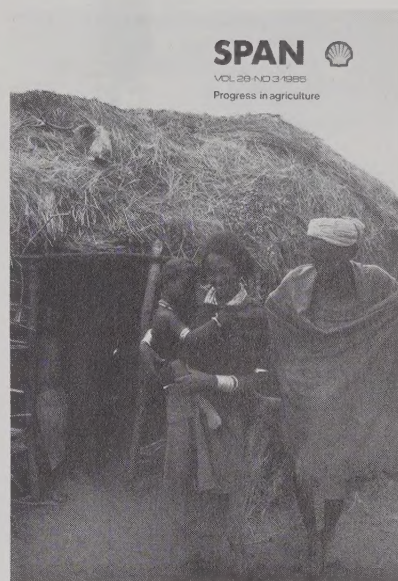
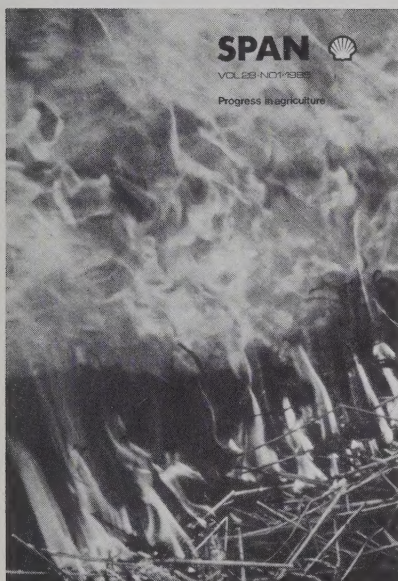
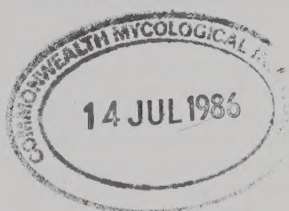


SPAN Index 1985

Volume 28 Nos 1,2,3



Author

- | | |
|-----------------------------|------------------------------|
| Agar, J. 87 | Huner, J.V. 57 |
| Al-Ahmad, T. 116 | Keech, M.A. 20 |
| Astley, D. 75 | Kermode, G.O. 56 |
| Baker, C.K. 76 | Kitchling, R. 39 |
| Beets, W.C. 4 | Lavers, A. 8 |
| Blair-Rains, A. 42 | Lilwall, N.B. 87 |
| Blandford, D. 45 | Lockwood, G. 14 |
| Brown, F.R. 108 | Lyne, R.L. 105 |
| Brown, T.D.K. 68 | McCann, A.W. 98 |
| Caldwell, B.E. 16 | Metcalfe, J.R. 28 |
| Chandler, H.W. 106 | Muir, D.D. 30 |
| Chapman, G. 79 | Ndeda, J.O. 111, 113 |
| Cock, J.H. 23 | Norman, D.R. 84 |
| Colls, J.J. 76 | Parsons, A.J. 47 |
| Davies, F.S. 60 | Prichard, R.K. 72 |
| Dexter, K. 82 | Richard-Molard, M.S. 92 |
| Donaldson, G. 2 | Richardson, D.E. 66 |
| Fell, S.C.R. 35 | Ride, J.P. 53 |
| Fisher, J.P. 50 | Rijk, A.G. 63 |
| Goldson, J.R. 111, 113 | Ritchie, J.M. 100 |
| Goodwin, R.F.W. 71 | Tuijn, J.W. 7 |
| Gross, H.D. 16 | Walker, J.T. 102 |
| Hance, R.J. 11 | Whitehouse, P. 98 |
| Harris, B.A. 8 | Wilkinson, J.M. 89 |
| Hilton, J. 95 | Williams, A.A. 32 |
| Hinton, W.L. 26 | Wilton, B. 37 |
| Hopkins, K.D. 116 | |

Subject

a

Abutilon theophrasti, . . . 99
 Advisory services, agricultural,
 UK, . . . 82, 83 (figs.), 84 (fig.), 87,
 88, 102, 103 (figs.), 104 (fig.)
 Aerial photography, . . . 20 (fig.), 21 (fig.),
 22, 44
 Aerial spraying, . . . 8 (fig.), 9 (figs.), 10
 Africa, cassava cultivation, . . . 24, 25
 cocoa production, . . . 14, 15 (fig.)
 crop selection, . . . 4, 5 (fig.), 6 (fig.)
 finance for agriculture, . . . 81, 86, 87
 future of agriculture in, . . . 81
 insect pest identification, . . . 100, 101
 (fig.), 102
 rangeland management, . . . 42 (fig.),
 43 (figs.)
 wheat imports, . . . 6
 Agricultural information services,
 Commonwealth
 Agricultural Bureaux, . . . 28
 Agricultural mechanisation, developing
 countries, . . . 63 (fig.), 64 (fig.), 65 (figs.)
 Agricultural planning, aerial
 photography and, . . . 20 (fig.), 21
 (fig.), 22
 Agricultural policy, African states, . . . 81
 Agricultural Technical Extension
 Services, Department of,
 Zimbabwe, . . . 85, 86 (fig.)
Agrobacterium rhizogenes, . . . 94
 Agrochemical patent rights, . . . 7
 Agrochemical residues, detection of, . .
 90, 91 (fig.)
 Agroforestry, . . . 4, 5 (fig.), 6 (fig.), 43, 44
Agrotis spp., . . . 52
 Air pollution, crop growth and, . . . 76
 (figs.), 77 (fig.), 78 (fig.)
 Alachlor, . . . 24
 Albinism, cereals, . . . 105
 Alcohol, production from plant
 material, . . . 41, 88
 Alfamethrin, . . . 8 (fig.)
Allium sp., . . . 75
Alopecurus myosuroides, . . . 11
Alternaria citri, . . . 62
 Aluminium in soil, soya bean cultivation
 and, . . . 17
Amaranthus spp., . . . 18 (fig.), 99
 Aminotriazole, . . . 99
 Amur, white, . . . 58 (fig.)
 Anaplasmosis, . . . 113
 Andean latent virus (APLV), potato, . . . 68
 Androstenedione, fecundity in sheep
 and, . . . 35
 Animal breeding, cattle, . . . 112, 113, 114,
 115 (figs.)
 for adaption to climatic changes, . . . 1
 sheep, . . . 35 (fig.), 36 (fig.)
 swamp buffalo, . . . 88
 tilapia, . . . 116 (fig.), 117 (fig.)
 Animal feedstuffs, crop
 wastes, . . . 88, 112 (fig.)
 soya bean, . . . 30, 31 (figs.), 80
 pesticide residue limits, . . . 56
 Animal health, cattle, Kenya, . . . 113, 115
 monoclonal antibodies and, . . . 91
 nematodes in ruminants, . . . 72 (fig.),
 73 (fig.), 74 (figs.)
 new techniques for vaccine
 production, . . . 68, 69 (fig.), 70
 (figs.), 90, 91 (fig.)
 poultry diseases, . . . 68, 69 (fig.), 70
 wildlife and, . . . 115

Animal welfare, research, . . . 71
Anomis flava, . . . 52 (fig.)
 Anthelmintics, . . . 72 (fig.), 73 (fig.), 74
 (figs.)
 Anther culture, cereal breeding, . . . 105
 Anthracnose, . . . 44
 Anthrax, . . . 113
 Antibodies, monoclonal, production
 and applications of, . . . 89 (fig.), 90
 (figs.), 91 (fig.)
Anticarsia gemmatilis, . . . 18 (fig.)
Aondeilla sp., . . . 62
Apanteles flavipes, . . . 29
 Aphid, control, . . . 18 (fig.), 50, 52 (fig.)
 potato virus diseases and, . . . 66 (fig.)
Aphis spp., . . . 52 (fig.), 62
Apoanagyrus lopezi, . . . 29
 Apple, EEC market, . . . 26, 27
 soft rot, . . . 53 (fig.)
 Aquaculture, . . . 57 (figs.), 58 (figs.), 59
 (fig.), 116 (fig.), 117 (figs.)
 Aquifers, heat pumps and use of, . . . 40
 Arachidic acid, . . . 104 (fig.)
Aristichthys nobilis, . . . 58 (fig.)
Armillaria mellea, . . . 62
 Artificial Insemination Service, Kenya,
 . . . 112, 113
 Asia, agricultural
 mechanisation, . . . 63 (fig.), 64 (fig.),
 65 (figs.)
 cassava cultivation, . . . 25 (fig.)
 cocoa production, . . . 14
 crop selection, . . . 4, 5 (figs.), 6 (fig.)
 rangeland utilisation, . . . 42, 44 (fig.)
 Atrazine, . . . 99
 Australia, rangeland improvement, . . . 42
 Austria, agrochemical patents, . . . 7
 rhizomania in sugar beet, . . . 92
Avena fatua, . . . 95, 97 (fig.)

b

Bacillus thuringiensis, . . . 9, 25
 Bacterial rots, potato, . . . 67, 68
 Bangladesh, agricultural development,
 . . . 65, 88
Barbaria vulgaris, . . . 96 (fig.), 97
 Barley, genetic engineering, . . . 105
 Barren broom, . . . 95
 Bass, largemouth, . . . 58 (fig.)
 Beans, intercropping, . . . 5 (fig.)
 nutrient requirements, . . . 25 (fig.)
 Beech, . . . 8
 Beef production, Kenya, . . . 113, 114 (fig.),
 115 (figs.)
 protein yields per hectare, . . . 79 (fig.)
 Beet necrotic yellow vein virus
 (BNYVV), . . . 92 (fig.), 93 (figs.),
 94 (fig.)
 Beetle pests, . . . 104
 Behenic acid, . . . 104 (figs.)
 Belgium, agrochemical patents, . . . 7
Bemisia tabaci, . . . 18 (fig.)
 Bentazone, . . . 98, 99
 Benzimidazole, . . . 72, 74 (fig.)
 Biological pest control, . . . 23, 25, 29
 (fig.), 62, 100, 101 (fig.)
 Biotechnology, monoclonal
 antibodies, . . . 89 (fig.), 90 (figs.),
 91 (figs.)
 progress and applications to
 agriculture, . . . 41
 UK Database, . . . 29
 Birch, . . . 8
 Bird pests, tropical crops, . . . 4

Black pod disease, cocoa, . . . 15
 Black quarter, . . . 113
 Blackgrass, . . . 11
 Blight, potato late, . . . 67
 Bollworms, cotton, . . . 52 (fig.)

Book reviews

*Agriculture and Environment: the
 Physical Geography of Temperate
 Agricultural Systems*,
 by Briggs and Courtney, . . . 120
*Aphids on the World's Crops – an
 Identification Guide*, by Blackman
 and Eastop, . . . 119
*Cassava: New Potential for a Neglected
 Crop*, by Cook, . . . 118
*Colour Atlas of Fruit Pests, a, their
 Recognition, Biology and Control*, by
 Aford, . . . 119
*European Dictionary of Agrochemical
 Products. Part 1 Fungicides; Part 2
 Herbicides; Part 3 Insecticides
 and Acaricides; Part 4
 Rodenticides and
 Nematicides*, ed. Kidd,
 Hartley and Kennedy, . . . 119
*Green Inheritance: the World Wildlife
 Fund Book of Plants*, by Huxley, . . .
 120
Living Garden, the, by Ordish, . . . 120
Pest Management, by Matthews, . . . 119
Progress in Plant Breeding – I, ed.
 Russell, . . . 118
Rats and Mice: their Biology and Control,
 by Meehan, . . . 119
Sugar Cane, by Blackburn, . . . 118
Vegetable Seed Production, by George, . .
 118
 Boron requirements, soya bean, . . . 18
Bos spp., . . . 111, 112, 113, 114
Botrytis spp., . . . 53 (fig.), 104
 Bovine pleuro-pneumonia, contagious,
 . . . 115
 Braconid wasps, use in biological pest
 control, . . . 29
 Brassica crops, genetic conservation, . . . 75
 insecticide use, . . . 13 (fig.)
 transplanting, . . . 108
 Brazil, citrus production, . . . 60, 61 (fig.),
 62
 fuel alcohol programme, . . . 88
 grain imports and economy of, . . . 3
 Broad bean, protein yields per hectare, . .
 79 (fig.)
Bromus sterilis, . . . 95
 Buffalo, improvement, . . . 88
 Buffalo fish, . . . 58 (fig.), 59
Bupalus piniarius, . . . 8
Busseola fusca, . . . 101 (fig.)
 1 – n – butylcarbamoyl oxendazole, . .
 73, 74 (figs.)

C

Canker, citrus, . . . 62
Cantharidae, . . . 104
 Carbon dioxide, effects of increase in
 atmosphere, . . . 1, 76
 Carp, . . . 58 (fig.), 59 (fig.)
 Carrot, EEC market, . . . 27
 genetic conservation, . . . 75
 Cassava, cultivation and
 improvement, . . . 4, 23 (figs.), 24
 (figs.), 25 (figs.)
 Cassava mealybug, biological control, . .
 29
 Catarrhal fever, malignant, . . . 113, 115

Catfish, . . . 57, 58 (figs.), 59
 Cattle, protein yields per hectare, . . . 79 (fig.)
 Cattle production, beef, . . . 113, 114 (fig.), 115 (figs.)
 dairy, . . . 30, 31 (fig.), 111 (figs.), 112 (figs.), 113
 Cauliflower, EEC markets, . . . 27
Cecropia obtusifolia, . . . 96
 Celery, EEC markets, . . . 27
 transplanting, . . . 108
Ceratocystis fimbriata, . . . 15
Cercospora beticola, . . . 93
 Cereal production, Africa, . . . 81
 Cereals, air pollution and growth of, . . . 76 (figs.), 77, 78
 breeding, . . . 41, 105
Ceroplastes sp., . . . 62
Chanos chanos, . . . 58 (fig.)
 Charlock, . . . 96 (fig.), 97
 Cheese, . . . 30
Chenopodium album, . . . 18 (fig.)
 China, aquaculture, . . . 57 (fig.)
 government aid to agriculture, . . . 62
 international trade agreements, . . . 45
Chloris gayana, . . . 112
 Chlortoluron, . . . 13
 Chromatography, . . . 33, 34, 73
Chrysomelidae, . . . 104
 Citrus, factors in successful cropping, . . . 60, 61 (figs.), 62
Citrus spp., . . . 60, 62
Clarias spp., . . . 58 (fig.)
 Climate, cassava cultivation and, . . . 23, 24 (fig.)
 citrus growth and, . . . 60, 61 (fig.)
 effect of changes on agriculture, . . . 1
 Clover, . . . 35
 Cocklebur, . . . 18 (fig.), 99
 Cocoa, genetic conservation and breeding, . . . 14 (fig.), 15 (figs.), 16
 Coconut, . . . 6 (fig.)
 Codex Alimentarius Commission (CAC), . . . 56
 Coffee mealybug, Kenya, . . . 100
Colletotrichum spp., . . . 44, 55
 Colorado beetle, . . . 68
 Combine harvester attachments, . . . 38 (fig.)
 Common Agricultural Policy (CAP), . . . 27
 Commonwealth Agricultural Bureaux, . . . 28, 29, 100
 Computer use, agricultural information, . . . 88
 air pollution studies and, . . . 76 (fig.), 77
 calibrating spraying equipment and, . . . 59
 Commonwealth Agricultural Bureaux information services, . . . 28, 29
 crop protection, . . . 19, 50
 scanners for measuring body composition, . . . 36
 studying climatic changes and, . . . 1
 Vegetable Gene Bank data storage, . . . 75
 Cooperatives, agricultural, . . . 62
Cordyceps spp., . . . 29 (fig.)
Coregonus spp., . . . 58 (fig.)
 Corn, protein yield per hectare, . . . 79 (fig.)
 Corn rootworm, . . . 13
 Corridor disease, . . . 115
Corynebacterium sepeidonicum, . . . 68
Cosmophila flava, . . . 52 (fig.)

Cotton, crop for tropical Africa, . . . 4, 85
 pest control, . . . 50, 51 (fig.), 52 (fig.), 100, 101 (fig.)
 Cottonseed, protein yield per hectare, . . . 79 (fig.)
 Council for Mutual Economic Assistance (COMECON), bilateral trade agreements, . . . 45
 Counter trade, international economic institutions and, . . . 45, 46
 Cowpeas, . . . 4
 Crayfish, red swamp, . . . 58 (fig.), 59
 Cream liqueurs, . . . 30 (fig.), 32
 Credit schemes for farmers, Africa, . . . 81, 86, 87
Crinipellis perniciosus, . . . 14
Crocosema sp., . . . 52 (fig.)
 Crop production, adaptation to climatic changes, . . . 1
 Crop selection in the tropics, . . . 4, 5 (figs.), 84
 Crops, protein yield per hectare, . . . 79 (fig.)
Ctenopharyngodon idealla, . . . 58 (fig.)
 Cuba, citrus production, . . . 60, 62
 Cucumber, EEC markets, . . . 26, 27
 Cucurbits, disease resistance, . . . 53, 55
 Cultivation, soil mechanics and, . . . 106, 107 (figs.)
 Cycloheximide, . . . 54
Cynodon dactylon, . . . 112
 Cypermethrin, . . . 9, 10
Cyperus spp., . . . 18 (fig.)
Cyprinus carpio, . . . 58 (fig.)
 Czechoslovakia, aquaculture, . . . 57 (fig.)

d

2, 4-D, . . . 12, 98, 99
 Dairy production, EEC, . . . 30, 31 (fig.)
 Kenya, . . . 111 (figs.), 112 (figs.), 113
 Dairy products, processing, . . . 30 (fig), 31 (figs.), 32
 Dalapon, . . . 98
 DD, . . . 93 (fig.)
 DDT, . . . 9
 DDVP, . . . 9
Desmodium spp., . . . 44
Deuterophoma tracheiphila, . . . 60
Diabrotica sp., . . . 13
Diachrisia obliqua, . . . 18 (fig.)
Diaporthe medusmaea, . . . 62
 Dichlorocyclopropane (WL28325), . . . 55 (fig.)
Digitaria spp., . . . 18 (fig.)
 Diplodia disease, citrus, . . . 60
Diplodia natalensis, . . . 60
 Diuron, . . . 24
 DNA, genetic manipulation, . . . 41, 69, 70 (fig.)
 Drainage, . . . 64
 Duck production, aquaculture and, . . . 57 (fig.)
Dysdercus fasciatus, . . . 101 (fig.)

e

Earias huegeli, . . . 52 (fig.)
 East Africa, centre for identification of insect pests, . . . 100, 101 (fig.), 102
 East Coast fever, . . . 113
Echinochloa crus-galli, . . . 18 (fig.)

Egypt, citrus production, . . . 60, 62
Eleusine indica, . . . 18 (fig.)
Elsinoe fawcettii, . . . 60
 Embryo transplantation, cattle, . . . 113
 Energy, agriculture in Asia and consumption of, . . . 64
 fuel production from crops, . . . 41, 88
 glasshouse heating costs, . . . 39 (fig.)
 groundwater heat pump, . . . 39 (fig.), 40 (fig.)
 Environmental safety, pesticide use and, . . . 56
 Enzyme Linked Immuno Sorbent Assay (ELISA), . . . 94
 EPTC, . . . 12
Erwinia spp., . . . 67
Escherichia coli, . . . 69, 91
 Ethanol production from plant material, . . . 41, 88
 Ethylene glycol, use in heat exchange pump, . . . 39
 Eucalyptus wind breaks, . . . 60
Euphorbia spp., . . . 18 (fig.)
 Europe, agrochemical patents, . . . 7
 rhizomania in sugar beet, . . . 92, 94
 European Economic Community (EEC),
 agricultural subsidies, . . . 3
 dairy production, . . . 30, 31 (fig.)
 fruit and vegetable markets, . . . 26, 27
 international coordination of pesticide residue limits and, . . . 56
 land use statistics, . . . 78
 soya bean imports, . . . 79
 Evening primrose, cultivation, . . . 102 (figs.), 104
 Evening primrose oil, properties and composition of, . . . 102, 103 (figs.), 104 (fig.)
 Exchange rates, world grain trade and, . . . 2, 3
 Excortis, . . . 60, 62
 Extension services, Bangladesh, . . . 88
 UK, . . . 82, 83 (figs.), 84 (fig.), 87, 88
 Zimbabwe, . . . 84, 85 (figs.), 86 (figs.), 87

f

Farm size and mechanisation, Asia, . . . 64
Fasciola hepatica, . . . 72
 Fatty acid composition, evening primrose oils, . . . 102, 104 (fig.)
 Fecundity in sheep, . . . 35, 36, 91
 Fenbendazole, . . . 72, 73, 74 (fig.)
 Fenitrothion, . . . 9
 Fermentation, new technology, . . . 41
 Fertiliser manufacture, energy use, . . . 64
 Fertiliser use, citrus production, . . . 60
 Film, *Escape from Hunger*, . . . 62
 Fish farming, . . . 57 (figs.), 58 (figs.), 59 (fig.), 116 (fig.), 117 (figs.)
 Flavour in food and drink, . . . 32, 33 (fig.), 34 (figs.)
 Fluoride, effect on crop growth, . . . 76, 77, 78
 Food, detection of drug residues in, . . . 90, 91 (fig.)
 Food and Agriculture Organisation (FAO), . . . 56, 88
 Food processing, cassava, . . . 25 (fig.)
 citrus products, . . . 60
 dairy products, . . . 30 (fig.), 31 (figs.), 32
 extrusion technology, . . . 80
 flavour assessment, . . . 32, 33 (fig.), 34 (figs.)
 textured soya protein, . . . 79 (fig.), 80

Food standards, international coordination of, . . . 56

Foot-and-mouth disease, . . . 113, 114

Forests, climatic change and destruction of, . . . 1

Forestry, micropropagation of plants, . . . 41

pest control, . . . 8 (fig.), 9 (figs.), 10 (fig.)

rangeland improvement and, . . . 43, 44

tropical agriculture and, . . . 4, 5 (fig.), 6 (fig.)

Formulation, herbicide performance and, . . . 13, 98, 99

Fowlpox virus, genetic manipulation, . . . 69, 70 (fig.)

France, agrochemical patents, . . . 7

fruit and vegetable market, . . . 26, 27

rhizomania in sugar beet, . . . 92 (fig.), 93 (figs.), 94

French bean, . . . 99

Fruit, EEC markets, . . . 26, 27

Fruit flies, . . . 62

Fruit production, citrus, . . . 60, 61 (figs.), 62

Fuel production from plant material, . . . 41, 88

Fungicide use, control of rhizomania in sugar beet and, . . . 93 (fig.)

formulation, . . . 98

Fungus Cultures, UK National Collection of, . . . 29

Fungus diseases, citrus, . . . 60, 61 (fig.)

evening primrose, . . . 104

resistance of plants to, . . . 53 (fig.), 54 (figs.), 55 (fig.)

g

Game, cropping on rangeland, . . . 42, 115

livestock production and, . . . 115

Gamma linolenic acid (GLA), . . . 102, 103, 104 (fig.)

Ganmodoki, . . . 80

General Agreement on Tariffs and Trade (GATT), . . . 2, 46

Genetic conservation, . . . 1, 14, 15, 16, 74

Genetic manipulation, beet necrotic yellow vein virus (BNYVV), . . . 94

cereals, . . . 105

monoclonal antibodies and, . . . 91 (fig.)

new poultry vaccines, . . . 69, 70 (figs.)

recombinant DNA technology, . . . 41

Germany, Federal Republic of, agrochemical patents, . . . 7

fruit and vegetable market, . . . 26, 27

rhizomania in sugar beet, . . . 92

Glasshouse heating, costs, . . . 39 (fig.)

groundwater heat pump for, . . . 39, 40 (fig.)

Glasshouse production, EEC, . . . 26, 27

Globodera spp., . . . 67

Glyphosate, . . . 98, 99

Goose husbandry, . . . 57, 59

Grain, world trade, . . . 2, 3

Grain borer, larger, . . . 100

Grain storage, losses due to pests, . . . 100

Grapholita spp., . . . 18 (fig.)

Grassland, losses due to air pollution, . . . 78

Grassland improvement, in rangelands, . . . 42, 44

Grassland management, fencing, . . . 35

grazing animals and, . . . 47 (fig.), 48 (figs.), 49 (fig.)

Kenya, . . . 112, 113

nematode infestations in ruminants and, . . . 72

Grazing behaviour, sheep, . . . 48

Grazing systems, cattle, Kenya, . . . 112, 113

Greece, fruit and vegetable market, . . . 26, 27

Green spider mite, . . . 25

Grevillea robusta, . . . 5 (fig.)

Groundnut production, Zimbabwe, . . . 85 (fig.)

Groundsel, . . . 97

Groundwater heat pump, . . . 39, 40 (fig.)

Guinea grass, . . . 18 (fig.), 112

Gypsum, . . . 85 (fig.)

Gypsy moth, . . . 8

h

Haemonchus contortus, . . . 72 (fig.), 73, 74 (fig.)

Harvesting, citrus fruits, . . . 62

evening primrose, . . . 104

HCH, . . . 9

Heat pump, groundwater, . . . 39

Heliothis spp., . . . 18 (fig.), 52 (fig.), 101 (figs.)

Heliothrips spp., . . . 62

Hepatitis B virus, vaccine, . . . 69

Herbicide use, cassava, . . . 24

citrus, . . . 60

evening primrose, . . . 104

formulation and performance, . . . 13, 98, 99

rangelands, . . . 43

soya bean, . . . 18, 19 (fig.)

training, . . . 86

Herbicides, distribution in soil, . . . 11 (fig.), 12 (fig.), 13

Hordeum bulbosum, . . . 105

Hypophthalmichthys molitrix, . . . 58 (fig.)

i

Ictalurus punctatus, . . . 58 (figs.)

Ictiobus spp., . . . 58 (fig)

Immunisation, production of monoclonal antibodies, . . . 35, 39

India, agrochemical patents, . . . 7

farm mechanisation, . . . 63, 64

land reform, . . . 62

Indonesia, farm mechanisation, . . . 64, 65

international trade agreements, . . . 45

Infectious bronchitis virus (IBV), new vaccine, . . . 69, 70 (fig.)

Information technology, agricultural extension and, . . . 87

Infrared photography, aerial, . . . 21 (fig.), 22

Insect pests, forecasting attacks, . . . 50, 51 (figs.), 52 (fig.)

identification service, . . . 100, 101 (figs.), 102

losses due to, . . . 100

Insecticide use, aerial spraying, . . . 8 (fig.), 9 (figs.), 10

forecasting pest attacks and, . . . 50, 51 (figs.), 52 (fig.)

forestry, . . . 8 (fig.), 9 (figs.), 10 (fig.)

formulation, . . . 10, 98

Insecticides, distribution in soil, . . . 11 (fig.), 13 (fig.)

Intensive poultry production, disease control, . . . 68, 69 (fig.)

Interferon, purification of, . . . 91

International Board for Plant Genetic Resources (IBPGR), . . . 15, 75

International Centre of Tropical Agriculture (CIAT), . . . 23 (fig.)

International finance, grain trade and, . . . 2, 3

International Laboratory for Research on Animal Diseases (ILRAD), . . . 113

International Maize and Wheat Improvement Centre (CIMMYT), . . . 28

International Monetary Fund (IMF), . . . 2, 46

International Plant Protection Centre (IPPC), . . . 10

International Potato Centre (CIP), . . . 68

International Wheat Council, . . . 2

Iran, international trade agreements, . . . 45

Irrigation, African agriculture and, . . . 81

Asian agriculture and, . . . 64 (fig.)

citrus production, . . . 60

climatic changes and, . . . 1

extension services, . . . 85, 86 (fig.)

fish culture and, . . . 116, 117

grassland, . . . 49

groundwater heat pumps and, . . . 40

potatoes, . . . 68

rhizomania in sugar beet and, . . . 92, 93

rice, . . . 5 (fig.)

soya bean, . . . 19

utilisation of rangeland and, . . . 42

Italy, agrochemical patents, . . . 7

citrus production, . . . 60, 61 (fig.)

fruit and vegetable market, . . . 26, 27

rhizomania in sugar beet, . . . 92, 93

j

Jamaica, international trade agreements, . . . 45

Japan, agricultural subsidies, . . . 3

citrus production, . . . 60

mechanisation of agriculture, . . . 64

rhizomania in sugar beet, . . . 92

soya bean imports, . . . 79

Java, agricultural development strategy, . . . 65 (fig.)

Johnson grass, . . . 98

k

Kenya, beef production, . . . 113, 114 (fig.), 115 (figs.)

crop selection and rainfall, . . . 6 (fig.)

milk production, . . . 111 (figs.), 112 (figs.), 113

Kikuyu grass, . . . 112

Korea, Republic of, farm mechanisation, . . . 63, 64, 65

Kuwait, fish culture, . . . 116 (fig.), 117 (figs.)

l

Laboratory animals, welfare, . . . 71

Labour shortages, Asia, . . . 63, 64

Lamprosema indicata, . . 18 (fig.)
 Land clearance, mechanisation of, . . 63 (fig.), 64
 Land reform, India, . . 62
 Land use, aerial photography, . . 20 (fig.), 21 (fig.), 22
 rangelands, . . 42, 44
 statistics, EEC, . . 78
 Legumes, rangeland improvement and, . . 43
Lepomis macrochirus, . . 58 (fig.)
Leptinotarsa decemlineata, . . 68
 Lettuce, air pollution and growth of, . . 76, 77 (fig.)
 EEC market, . . 27
 transplanting, . . 108
Leucaena leucocephala, . . 44
 Liechtenstein, agrochemical patents, . . 7
 Light, role in germination of weed seeds, . . 95 (fig.), 96 (figs.), 97 (fig.)
 Lignin, . . 54 (fig.), 55
 Lignoceric acid, . . 104 (fig.)
 Linoleic acid (vitamin F), . . 102, 104 (fig.)
 Linolenic acid, . . 104 (fig.)
 Liver fluke, . . 72
 Livestock production, animal welfare and, . . 71
 aquaculture and, . . 57
 climatic changes and, . . 1
 geese, . . 57, 59
 grazing management and, . . 47 (figs.), 48 (figs.), 49 (fig.)
 poultry, . . 68, 69 (fig.)
 protein yields per hectare, . . 79 (fig.)
 rangelands, . . 42, 43 (fig.), 44
 sheep, . . 35 (fig.), 36 (fig.), 48 (fig.)
 Locust, biological control, . . 29 (fig.)
Lolium perenne, . . 47, 78
 Luxembourg, agrochemical patents, . . 7
Lymantria spp., . . 8 (fig.), 9, 10 (fig.)

m

Macrobrachium rosenbergii, . . 58 (fig.)
Macroptilium sp., . . 44
 Maize, herbicide use, . . 99
 losses due to pests, . . 100
 nutrient requirements, . . 25 (fig.)
 selection as tropical crop, . . 4, 5 (figs.), 6 (fig.)
 Maize production, Zimbabwe, . . 84, 85
 Mal de machete disease, cocoa, . . 15
 Mal secco disease, citrus, . . 60
 Malaysia, farm mechanisation, . . 63, 65
Manihot esculenta, . . 23
 Mapping, aerial photography and, . . 21, 22
 Marketing agricultural products, Africa, . . 87, 111 (fig.), 114
 Mastitis, . . 113
 Mathematical models, grassland management, study of grazing and, . . 48, 49
 MCPA, decomposition by soil microorganisms, . . 12
 Mealybugs, . . 25, 29, 100
 Meat substitutes, . . 41, 79 (fig.), 80
 Mechanisation, agricultural, in developing countries, . . 63 (fig.), 64 (fig.), 65 (figs.)
 cultivation and soil mechanics, . . 106, 107 (figs.)
 transplanting field vegetables, . . 108 (fig.), 109 (figs.), 110 (fig.)
Melanogromyza phaseoli, . . 18 (fig.)
Meloidogyne spp., . . 18 (fig.)

Meristem, plant propagation from, . . 41
Metapenaeus spp., . . 58 (fig.)
 Methyl bromide, . . 93 (fig.)
 Mexico, agrochemical patents, . . 7
 citrus production, . . 60
 grain imports and economy of, . . 3
 Microencapsulation, . . 90 (figs.)
 Micropropagation, . . 41, 66
Micropterus salmoides, . . 58 (fig.)
 Mildew, . . 53, 104
 Milk, protein yields per hectare, . . 79 (fig.)
 Milk production, EEC, . . 30, 31 (fig.)
 Milk products, processing, . . 30 (fig.), 31 (figs.), 32
 Milkfish, . . 58 (fig.)
 Millet, . . 4 (fig.), 6 (fig.)
 Mites, . . 52 (fig.), 62
 Mohr-Coulomb failure criterion, soil, . . 106, 107 (fig.)
 Molybdenum requirements, soya bean, . . 18
 Monoclonal antibodies, production and applications of, . . 89 (fig.), 90 (figs.), 91 (fig.)
Mononychellus tanajoa, . . 25
Mugil cephalus, . . 58 (fig.)
 Mullet, . . 58 (fig.)
 Mustard, white, . . 95 (fig.), 96
 Mycoplasma-like organisms (MLO), diseases of citrus and, . . 62
 Mycorrhiza, cassava, . . 23
 Myristic acid, . . 104 (fig.)

n

Nandi setaria, . . 112
 Napier grass, . . 112
 Nematocide distribution in soil, . . 11 (fig.)
 Nematodes, citrus, . . 62
 in ruminants, . . 72 (fig.), 73 (fig.), 74 (figs.)
 potato cyst, . . 67, 68
 soya bean, . . 18 (fig.)
 Netherlands, agrochemical patents, . . 7
 glasshouse production, . . 26, 27
 transplanting vegetables mechanically, . . 108 (fig.)
 Neutron analysis, . . 36
 New Zealand, international trade agreements, . . 45
 sheep production, . . 35
Nezara viridula, . . 18 (fig.), 52 (fig.)
 Nitrogen fixation, . . 5, 17, 18
 Nitrogen oxides, effect on crop growth, . . 76, 78
 Nun moth, . . 8 (figs.), 9, 10 (fig.)
 Nutrient requirements, cassava, . . 25 (fig.)
 soya bean, . . 17 (fig.)
 Nutrition, human, evening primrose oil and, . . 102, 103

o

Oak, . . 5 (fig.), 8
 Oats, protein yields per hectare, . . 79 (fig.)
Oenothera spp., . . 102, 103 (figs.), 104 (fig.)
 Oil palm, micropropagation, . . 41
 Oleic acid, . . 104 (fig.)

Onion, EEC markets, . . 27
 genetic conservation, . . 75
Ophicephalus spp., . . 58 (fig.)
Oreochromis spp., . . 58 (fig.), 116, 117 (fig.)
 Organisation for Economic Cooperation and Development (OECD), . . 45
 Organophosphate insecticides, . . 9
Ostertagia spp., . . 72, 73, 74 (fig.)
 Oxfendazole, . . 72 (fig.), 73, 74 (figs.)
 Ozone, effects on crop growth, . . 76, 77, 78

p

Palm, micropropagation, . . 41
 Palmitic acid, . . 104 (fig.)
 Palmitoleic acid, . . 104 (fig.)
Panicum spp., . . 18 (fig.), 112
Panolis flammea, . . 8
Panonychus citri, . . 62
 Papaya, . . 6 (fig.)
 Paper pots, for transplanting vegetables, . . 93 (fig.), 108, 110
 Paraquat, . . 99
 Patent rights for agrochemicals, . . 7
 Payment-in-kind (PIK) Scheme, USA, . . 3
 Peach, EEC markets, . . 26
 Peat, plant propagation and use of, . . 66, 108 (fig.), 109, 110
 Peg board, recording pest numbers with, . . 51 (fig.)
Penaeus spp., . . 58 (fig.)
Penicillium moulds on citrus, . . 60, 61 (fig.)
Pennisetum spp., . . 112
 Pest management, cassava, . . 24, 25
 citrus, . . 62
 Commonwealth Agricultural Bureaux services, . . 29
 forecasting and decision making, . . 50, 51 (figs.), 52 (fig.)
 forests, . . 8 (figs.), 9 (figs.), 10 (fig.)
 pest identification services, . . 29, 100, 101 (figs.), 102
 soya bean, . . 18 (fig.), 19
 Pesticide application, calibration of spraying equipment, . . 59
 Pesticide formulation, . . 12, 13 (fig.), 98, 99
 Pesticide Residues, Codex Committee on, . . 56
 Pesticide residues, safety of food and, . . 41, 56
 Pesticide use, distribution in soil, . . 11 (fig.), 12 (fig.), 13 (figs.)
 training users, . . 86
Phakopsora pachyrhizi, . . 18 (fig.)
Phaseolus vulgaris, . . 99
Phenacoccus manihotis, . . 25
 Pheromone traps, . . 52
 Philippines, livestock production, . . 5, 88
 rice production, . . 62
 Phosphorus, soil, . . 23
 Photography, aerial, . . 20 (fig.), 21 (fig.), 22
Phyllocoptruta oleivora, . . 62
Phytorimaea operculella, . . 67
 Phytoalexins, resistance of plants to fungal diseases and, . . 54, 55
 Phytochrome, role in seed germination, . . 95 (fig.), 96
Phytophthora spp., . . 15, 18 (fig.), 54, 60, 67
Phytoseiid spp., . . 25

Pig production, aquaculture and, . . . 56, 59
 measuring carcass composition, . . . 83 (fig.)
 protein yields per hectare, . . . 79 (fig.)
 Pike-perch, . . . 58 (fig.), 59
 Pine, pests of, . . . 8, 9, 10
 use as windbreaks, . . . 60
 Pine beauty moth, . . . 8
 Pine looper, . . . 8
 Pineapple, . . . 6 (fig.)
Piper auritum, . . . 96
Planococcus spp., . . . 62, 100
 Plant breeding, cassava, . . . 24
 cereals, . . . 105
 cocoa, . . . 14 (fig.), 15 (figs.), 16
 for adaptation to climatic changes, . . . 1
 for disease resistance, . . . 53, 92 (fig.),
 93, 94
 genetic engineering and, . . . 41
 maize, . . . 4
 potato, . . . 66, 67, 68
 soya bean, . . . 16, 18
 sugar beet, . . . 92 (fig.), 93, 94
Plantago major, . . . 95 (fig.), 96 (fig.), 97
 Plantain, great, . . . 95 (fig.), 96 (fig.), 97
Plasmopora viticola, . . . 53
 Ploughing, . . . 37 (fig.), 38, 107 (fig.)
Plusia argentifera, . . . 52 (fig.)
Poa trivialis, . . . 96
 Poland, pest control in
 forests, . . . 8 (figs.), 9 (figs.), 10 (fig.)
Polistes sp., . . . 25
 Pollen cells, cereal breeding from, . . . 105
 Pollution, air, effect on crop growth, . . .
 76 (figs.), 77 (fig.), 78 (fig.)
Polymyxa betae, . . . 92, 93, 94
 Polyurethane, . . . 110
Poncirus trifoliata, . . . 62
 Portugal, fruit and vegetable market, . . . 26
 Potato, EEC markets, . . . 27
 factors in successful
 cropping, . . . 66 (fig.), 67 (figs.), 68
 nutrient requirements, . . . 25 (fig.)
 resistance to fungal diseases, . . . 54
 Potato leafroll virus (PLRV), . . . 66 (fig.), 67
 Potato spindle tuber viroid (PSTV), . . . 68
 Potato virus Y (PVY), . . . 66
 Poultry production, aquaculture and, . . .
 57 (fig.), 59
 intensive, disease control in, . . . 68, 69 (fig.)
 protein yields per hectare, . . . 79 (fig.)
 Prawn, freshwater, . . . 58 (fig.)
 Prices, agricultural products, Africa, . . .
 81, 112, 114
Procambarus clarkii, . . . 58 (fig.)
 Progesterone, . . . 90, 91 (fig.)
 Propagation, citrus, . . . 62
 micro, . . . 41
 potato, . . . 66, 67 (figs.)
 vegetables, mechanical
 transplanting and, . . . 108 (fig.),
 109 (figs.), 110 (fig.)
 Propyzamide, . . . 13
 Prostaglandin (PGE-1), . . . 102
Prostephanus truncatus, . . . 100
 Protein yields per hectare, animals and
 plants, . . . 79 (fig.)
Pseudophasia includens, . . . 18 (fig.)
 Psoriasis virus disease, citrus, . . . 60
 Pyrethroid insecticides, . . . 8, 9
Pyricularia oryzae, . . . 55 (fig.)

r

RNA, genetic manipulation, . . . 69, 70
 Radio, use in extension programmes, . . .
 86, 87, 88

Radioactive isotopes, . . . 90, 91 (fig.)
 Radish, genetic conservation, . . . 75
Radopholus similis, . . . 62
 Rainfall, Africa, . . . 6 (fig.), 81, 84, 87, 113
 rangelands, . . . 42
 tropical crop selection and, . . . 4
 (fig.), 5, 6 (fig.)
 Rainfastness, herbicide formulation
 and, . . . 98, 99
 Rangelands, management and
 improvement, . . . 22, 42 (fig.), 43
 (figs.), 44 (fig.), 113
 Redroot pigweed, . . . 99
 Red spider mite, . . . 101 (fig.)
 Redwater, . . . 113
 Remote sensing, . . . 44
 Research, animal welfare, . . . 71
 extension services and, . . . 82, 85, 87,
 88
Rhizobium sp., . . . 17, 18
 Rhizomania in sugar beet, . . . 92 (fig.), 93
 (figs.), 94 (fig.)
 Rhodes grass, . . . 112
Rhyparidia morosa, . . . 104
 Rice, crop selection in tropics, . . . 4, 5 (figs.)
 disease resistance, . . . 55 (fig.)
 nutrient requirements, . . . 25 (fig.)
 Rice blast, . . . 55 (fig.)
 Rice production, aquaculture and, . . . 59
 protein yields per hectare, . . . 79 (fig.)
 Rift Valley fever, . . . 113
 Rinderpest, . . . 113, 115
Rottboellia exaltata, . . . 18 (fig.)
 Rough meadow-grass, . . . 96
 Rusts, . . . 18 (fig.), 53, 54 (fig.)
 Ryegrass, perennial, . . . 47 (fig.), 78 (fig.)

S

Saissetia sp., . . . 62
Salmo spp., . . . 58 (fig.)
 Salmon, Atlantic, . . . 57, 58 (fig.)
Salmonella sp., . . . 59
Sarotherodon spp., . . . 58 (fig.)
 Satellite use, . . . 1, 21, 22
 Scab, . . . 60, 68
 Scale, citrus, . . . 62
 Seed, detection of pathogens in, . . . 90, 91
 (fig.)
 germination, light and, . . . 95 (fig.),
 96 (figs.), 97 (fig.)
 pesticide treatments, . . . 13
 potato, . . . 66, 67 (figs.), 68
 vegetables, . . . 75
Senecio vulgaris, . . . 97
Septoria oenotherae, . . . 104
Setaria spp., . . . 18 (fig.), 99, 112
 Sheep, breeding, . . . 35 (fig.), 36 (fig.)
 fecundity in, . . . 35, 36, 91
 nematode infections in, . . . 72, 73, 74
 (figs.)
 Sheep production, grazing
 management, . . . 48 (fig.)
 new techniques, . . . 35 (fig.), 36 (fig.)
 Shrimp, marine, . . . 58 (fig.)
 Simazine, . . . 12, 13 (fig.)
Sinapis spp., . . . 95 (fig.), 96 (fig.), 97
 Sisal, . . . 4, 112 (fig.)
 Snakeheads, . . . 58 (fig.)
 Soil, clearance and preparation, . . . 63
 (fig.), 64
 cultivation and weed seed
 germination, . . . 95, 96 (fig.), 97
 incorporating straw into, . . . 37 (fig.), 38
 pesticide distribution in, . . . 11 (fig.)
 Soil conditions, cassava cultivation and,
 . . . 23, 25 (fig.),

citrus growth and, . . . 60, 62
 crop selection and, . . . 4 (fig.)
 rangelands, . . . 43
 rhizomania in sugar beet
 and, . . . 92, 93, 94
 soya bean cultivation and, . . . 17, 18
 weed seed germination and, . . . 97
 Soil erosion, . . . 21, 37, 81
 Soil testing service, UK, . . . 84 (fig.)
 Soil mechanics, cultivations
 and, . . . 106, 107 (figs.)
 Soil surveys, . . . 21, 22
Solanum sp., . . . 66
 Sorghum, . . . 4 (fig.), 5, 6 (fig.)
Sorghum halepense, . . . 18 (fig.), 98
 Soya bean, factors in successful
 cropping, . . . 16, 17 (figs.), 18 (fig.),
 19 (figs.)
 food processing, . . . 79 (figs.), 80
 new varieties, . . . 88
 nutrient requirements, . . . 17 (fig.)
 protein yields per hectare, . . . 79 (fig.)
 tropical crop selection, . . . 5 (fig.), 6,
 16
 world production, . . . 79
 Soya bean oil, dairy cattle feed, . . . 30, 31
 (fig.)
 Spain, agrochemical patents, . . . 7
 citrus production, . . . 60, 61 (fig.)
 fruit and vegetable market, . . . 26,
 27
Spodoptera spp., . . . 18 (fig.)
 Spraying, aerial, . . . 8 (fig.), 9 (figs.), 10
 equipment, . . . 10, 59
 formulation and, . . . 98, 99
 herbicide, . . . 12 (fig.), 13, 98, 99
 Spruce, . . . 8, 9, 10
 Star grass, . . . 112
 Stearic acid, . . . 104 (fig.)
Stizostedion luciperca, . . . 58 (fig.)
 Storage, grain, losses due to pests, . . . 100
 Straw, alternative uses for, . . . 38
 burning, . . . 37
 incorporation into soil, . . . 37 (fig.),
 38 (figs.)
 Strawberry, EEC markets, . . . 27
Streptomyces scabies, . . . 68
Stylosanthes spp., . . . 44
 Sugar beet, herbicide use, . . . 12 (fig.)
 mechanical transplanting, . . . 110
 rhizomania in, . . . 92 (fig.), 93 (figs.),
 94 (fig.)
 Sugar cane, animal feed, . . . 88
 fuel production from, . . . 88
 Sugar cane borer, biological control, . . .
 29
 Sulphur dioxide, effect on crop
 growth, . . . 76 (figs.), 77, 78
 Sulphur requirements, soya bean, . . . 17
 (fig.), 18
 Sunfish, bluegill, . . . 58 (fig.)
 Sunflower, protein yields per hectare, . . .
 79 (fig.)
 Sunflower oil, . . . 102
 Sweden, agrochemical patents, . . . 7
 Switzerland, agrochemical patents, . . . 7
 Swollen shoot virus disease, cocoa, . . . 15
Sylepta ruralis, . . . 18 (fig.)
Synchytrium endobioticum, . . . 67

t

Taiwan, agrochemical patents, . . . 7
 farm mechanisation, . . . 63, 64, 65
 Terbutryne, . . . 13
Tetranychus spp., . . . 52 (fig.), 101 (fig.)
 Textured vegetable protein, . . . 79 (fig.),
 80

Thailand, farm mechanisation, . . 63, 64
Theobroma spp, . . 14
 Thiabendazole, . . 73, 74 (fig.)
 Threshing, manual, . . 65 (fig.)
 Thrips, . . 52 (fig.), 62
Thrips imaginis, . . 52 (fig.)
 Tick-borne diseases, cattle, . . 113, 115
 Tilapia culture, . . 58 (fig.), 59, 116 (fig.),
 117 (figs.)
Tilapia spp, . . 58 (fig.)
 Tillage, incorporation of straw into soil
 and, . . 37, 38
 minimum, pesticide use and, . . 11
 soil mechanics and, . . 106, 107 (figs.)
Tilletia tritici, . . 29 (fig.)
Tipula spp, . . 52
 Tissue culture, . . 71, 90 (figs.), 91 (fig.), 105
 Tobacco rattle virus (TRV), in potatoes,
 . . 67
 Tofu, . . 80
 Tomatine, antifungal properties, . . 54
 Tomato, disease resistance, . . 54
 EEC markets, . . 26, 27
 Trade, international, counter trading
 agreements and, . . 45, 46
 Transplanting vegetables, . . 93 (fig.), 108
 (fig.), 109 (figs.), 110 (fig.)
Trichogramma sp, . . 25
Trichostrongylus colubriformis, . . 72
 (fig.), 73, 74 (fig.)
 Trifluralin, . . 104
 Tristeza virus disease, citrus, . . 60, 62
 Tropics, cassava cultivation, . . 23, 24
 (fig.), 25
 crop selection, . . 4 (fig.), 5 (figs.),
 6 (figs.)
 Trout, rainbow, . . 57, 58 (fig.)
 Trypanosomiasis, . . 115
 Tsetse fly, . . 115
 Tuber moth, potato, . . 67, 68
Tylenchulus semipenetrans, . . 62

U

UK, agricultural extension
 services, . . 82, 83 (figs.), 84 (fig.),
 87, 88
 agrochemical patents, . . 7
 dairy production, . . 30
 fruit and vegetable market, . . 26, 27
 Potato Marketing Board, . . 66
 Professorship in Animal Welfare, . . 71
 straw burning regulations, . . 37
 Ultra low volume (ULV) spraying, . . 8
 (fig.), 9 (fig.), 10, 99
 Ultrasonic probe for measuring
 subcutaneous fat, . . 36, 83 (fig.)
 United Nations Conference on Trade
 and Development (UNCTAD),
 counter trading agreements and,
 . . 46
 United Nations Development
 Programme (UNDP), . . 88
 Upper Volta, farming cooperatives, . . 62
 USA, citrus production, . . 60, 61 (fig.),
 62
 economic policy and agricultural
 trade, . . 2, 3
 fish farming, . . 58 (fig.), 59
 international trade agreements, . .
 45
 rangeland improvement, . . 42
 soya bean production, . . 79
 vegetable exports, . . 27
 USSR, food and agricultural subsidies,
 . . 3
 international trade agreements, . .
 45, 46

V

Vaccines, monoclonal antibodies and
 production of, . . 90, 91 (fig.)
 poultry diseases, . . 68, 69 (fig.), 70
 (fig.)
 tick-borne diseases, . . 113, 115
 Vegetables, EEC markets, . . 26, 27
 genetic conservation, . . 75
 mechanical transplanting, . . 108
 (fig.), 109 (figs.), 110 (fig.)
 Vegetable Gene Bank, . . 75
 Velvet leaf, . . 99
 Virus diseases, citrus, . . 60
 detection in seed stock, . . 90, 91
 (fig.)
 potato, . . 66 (fig.), 67, 68
 sugar beet, . . 92 (fig.), 93 (figs.),
 94 (fig.)
 Vitamin F, . . 102

W

Wart disease, potato, . . 67, 68
 Wasps, braconid, . . 29
 Water management, rangelands, . . 42
 (fig.), 43, 44
 soya bean, . . 19
 Water requirements, potato, . . 68
 tropical crops, . . 4 (fig.), 5 (figs.),
 6 (fig.), 23
 Water resources, Africa, . . 81
 Kuwait, fish culture and, . . 116, 117
 Weather forecasts, . . 1
 Weed control, cassava, . . 24
 evening primrose, . . 104
 soya bean, . . 18 (fig.)
 Weed seed germination, light
 and, . . 95 (fig.), 96 (figs.), 97 (fig.)
 Wheat, anther culture, . . 105
 disease resistance, . . 53, 54 (fig.)
 imports, Africa, . . 6
 protein yields per hectare, . . 79 (fig.)
 stem rust on, . . 54 (fig.)
 Whitefish, . . 58 (fig.), 59
 Wild oat, . . 95, 97 (fig.)
 Wildlife, livestock production and, . .
 115
 Wind breaks, . . 60
 Wine, flavour assessment, . . 33, 34 (fig.)
 Witches' broom disease, cocoa, . . 14, 15
 World Bank, . . 2, 81, 88
 World Health Organisation (WHO), . .
 56

X

X-rays, . . 36
Xanthium pennsylvanicum, . . 18 (fig.), 99
Xanthomonas citri, . . 62
 Xyloporosis, citrus, . . 60

Y

Yellow foxtail, . . 99
 Yellow rocket, . . 96 (fig.), 97
 Yields, atmospheric pollution and crop,
 . . 1, 78
 cassava, . . 23 (fig.), 25 (fig.)

citrus, . . 60
 fish farming, . . 58, 59
 grassland, . . 49
 potato, . . 67 (fig.)
 soya bean, . . 16
 sugar beet, . . 92 (fig.), 93

Yoghurt, . . 31 (fig.), 32
 Yuba, . . 80
 Yugoslavia, agrochemical patents, . . 7

Z

Zander, . . 58 (fig.)
 Zimbabwe, extension
 services, . . 84, 85 (figs.), 86 (figs.),
 87
 land use planning, . . 22
 Zinc, vegetable proteins and absorption
 of in diet, . . 80
Zygrita diva, . . 18 (fig.)

